

Motor Series **MTR4a**

Reversible Synchronous Motor



Application

Valve Actuators, Light displays, Textile machinery, Medical equipment, Air conditioning & refrigeration, Dampers, Peristaltic Pumps, Dosing Pumps, Vending machines, CCTV Camera positioning, any positioning Application.

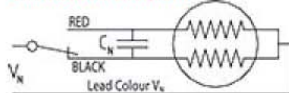
Design

MTR4a reversing synchronous

motor is of the permanent magnet type with two stator windings, for single phase AC 50/60 Hz. Phase displacement of the excitation current is achieved by connecting a capacitor in series with one of the stator windings. The sense of rotation is determined by the resulting circular rotating field. Electrical reversal of the sense of rotation is effected by means of a single-pole changeover switch. The 24 pole rotor which has a steel shaft polished to a mirror-finish rotates in sintered bronze bearings.

Motor can be provided with Mounting plate / Screw clip for fixing.

Connection Diagram



Standard data

Motor type	Reversible synchronous	
Ambient temperature operation	°C	-15...+55
Ambient temperature storage	°C	-20...+100
Thermal class	°C	105
Motor speed	r.p.m	250 @ 50 Hz
Life Expectancy	3 years in continuous operation	
Mounting	any position	
Standard motor voltage	V	24, 48, 110, 220 & 240 (others on request)
HVT	1.5 KV (motor voltage > 40V) or 1.5 KV (motor voltage < 40V); 30sec.	
Weight	Gm	200
Rotor Stalling	Motor can be stopped when the voltage is applied, without being overheated.	
Rotor Shaft	Hardened steel, ground and polished.	
Bearings	Sintered bronze, self lubricating	
External Dimensions	dia. 52 x 28.5 mm max.	

Technical Data

	V	24	48	110	220	240
Rated Voltage Vn	V	24	48	110	220	240
Operation capacitor (50 Hz) C _N	µF/VAC	10/50	2.2/100	0.39/250	0.1/400	0.1/400
Operation capacitor (60 Hz) C _N	µF/VAC	8.2/50	1.8/100	0.33/250	0.082/400	0.082/400
Lead colour (V _N)		Blue	Brown	White	Yellow	Yellow
Tolerance of voltage	%	-10...+15% of rated voltage				
Duty Cycle	%	100				
Rated Frequency	Hz	50			60	
Power output at rated voltage	W	0.6			0.63	
Speed	rpm	250			300	
Running torque at rated voltage	gm-cm	240			210	
Power consumption at rated voltage	W	3.1			3.2	
Detent torque	gm-cm	60				

Motor Drawing

